CLAIMS

What is Claimed is:

1. A method for defining an optimal integrated action plan for procurement, manufacturing, and marketing comprising:
   a) accessing materials planning parameters;
   b) accessing pricing parameters; and
   c) evaluating said materials planning parameters and said pricing parameters in conjunction to define said integrated action plan.

2. The method as recited in Claim 1, wherein said integrated action plan comprises:
   a build plan, a procurement plan, and a sales and pricing plan.

3. The method as recited in Claim 2, wherein said integrated action plan is an end of product life integrated action plan.

4. The method as recited in Claim 2, wherein said integrated action plan is a short life cycle integrated action plan.

5. The method as recited in Claim 1, wherein said materials planning parameters comprise:
   bill of material, and inventory.

6. The method as recited in Claim 1, wherein said pricing parameters comprise:
   a parameterized demand curve formed using a pricing information generating technique.

7. The method as recited in Claim 1, wherein said evaluating said materials planning parameters and said pricing parameters is done via an optimization engine employing a mathematical programming model and technique.

8. The method as recited in Claim 7, wherein the goal of said optimization engine is maximization of product gross profit.

9. The method as recited in Claim 7, wherein the goal of said optimization engine is optimizing the trade-off between product gross profit maximization and inventory write-off cost minimization.

10. The method as recited in Claim 7, wherein business rules are applied to said optimization engine.

11. The method as recited in Claim 10, wherein said business rules comprise:

objectives, budgets, parts procurement limits, and build capacity.

12. A computer system comprising:

a bus;

a memory unit coupled to said bus; and

a processor coupled to said bus, said processor for executing a method for defining an optimal integrated action plan for procurement, manufacturing, and marketing comprising:

a) accessing materials planning parameters, said materials planning parameters comprising:

bill of material, parts cost, capacity consumption, and inventory;

b) accessing pricing parameters, said pricing parameters comprising:

a parameterized demand curve, said parameterized demand curve formed using a pricing information generating technique, said pricing information generating technique obtained from the family of pricing information generating techniques comprising:

auction price analyzer, consumer survey, panel of judges, and statistical regression based models; and

c) evaluating said materials planning parameters and said pricing parameters in conjunction via an optimization engine, wherein said optimization engine employs a mathematical programming model and technique.

13. The computer system of Claim 12, wherein the goal of said optimization engine comprises:

maximizing product gross profit, or optimizing the trade-off between product gross profit maximization and inventory write-off cost minimization.

14. The computer system of Claim 13, wherein business rules are applied to said optimization engine.

15. The computer system of Claim 14, wherein said business rules comprise:

objectives, budgets, parts procurement limits, and build capacity.

16. The computer system of Claim 15, wherein said objectives comprise:

revenue, write-off, and profit.

17. The computer system of Claim 12, wherein said integrated action plan further comprises:

a build plan, a procurement plan, and a sales and pricing plan.

18. The computer system of Claim 17, wherein said integrated action plan is an end of product life integrated action plan.

19. The computer system of Claim 17, wherein said integrated action plan is a short life cycle plan.

20. The computer system of Claim 17, wherein said integrated action plan is further comprised of metrics.

21. The computer system of Claim 20, wherein said metrics comprise:
revenue, write-off, profit, and shadow prices.

22. The computer system of Claim 12, wherein said pricing parameters are obtained from a discrete said parameterized demand curve.

23. The computer system of Claim 12, wherein said pricing parameters are obtained from a continuous said parameterized demand curve.

24. The computer system of Claim 12, wherein said mathematical programming model and technique is obtained from the family of mathematical programming models and techniques comprising:

mixed integer models, linear models, non-linear models, and techniques such as simplex methods, interior point methods, branch and bound (cut), constraint programming, and meta-heuristics.

25. A computer-usable medium having computer-readable program code embodied therein for causing a computer system to perform a method for defining an optimal integrated action plan for procurement, manufacturing, and marketing comprising:

5   a) accessing materials planning parameters;

b) accessing pricing parameters; and

c) evaluating said materials planning parameters and said pricing parameters in conjunction to define said integrated action plan.

10   26. The computer-usable medium of Claim 25, wherein said integrated action plan comprises:

a build plan, a procurement plan, and a sales and pricing plan.

27. The computer-usable medium of Claim 26, wherein said
15   integrated action plan is an end of product life integrated action plan.

28. The computer-usable medium of Claim 26, wherein said integrated action plan is a short life cycle integrated action plan.

20   29. The computer-usable medium of Claim 25, wherein said materials planning parameters comprise:

bill of material, and inventory.

30. The computer-usable medium of Claim 25, wherein said pricing
25   parameters comprise:

a parameterized demand curve formed using a pricing information generating technique.

31. The computer-usable medium of Claim 25, wherein said
30   evaluating said materials planning parameters and said pricing parameters is done via an optimization engine employing a mathematical programming model and technique.

32. The computer-usable medium of Claim 31, wherein the goal of
35   said optimization engine is maximization of product gross profit.

33. The computer-usable medium of Claim 31, wherein the goal of said optimization engine is optimizing the trade-off between product gross profit maximization and inventory write-off cost minimization.

34. The computer-usable medium of Claim 31, wherein business rules are applied to said optimization engine.

35. The computer-usable medium of Claim 34, wherein said business rules comprise:

objectives, budgets, parts procurement limits, and build capacity.